Special Issue

Recognition of abrupt climate changes in clastic sedimentary environments

Edited by

Amir Mokhtari Fard*
Department of Physical Geography and Quaternary, Geohuset, Stockholm University, Frescati, S-10691 Stockholm, Sweden

CONTENTS

Foreword vii

Editorial ix

Rapid climatic changes recorded in loess successions
J. Vandenberghe and G. Nugteren 1
Characteristics and provenance of the loess deposits of the Gharatikan watershed in Northeast Iran
R. Okhravi and A. Amini 11
Sedimentary effects on the expansion of a Himalayan supraglacial lake
K. Chikita, J. Jha and T. Yamada 23
A 22,000 ^{14}C year BP sediment and pollen record of climate change from Laguna Miscanti (23°S), northern Chile
M. Grosjean, J.F.N. van Leeuwen, W.O. van der Knaap, M.A. Geyh, B. Ammann, W. Tanner, B. Messerli, L.A. Núñez, B.L. Valero-Garcés and H. Veit 35
Climatic versus tectonic factors in the formation of the glaciolacustrine succession (Belchatów outcrop, central Poland)
B. Gruszka 53
Rapid changes in Late Pleistocene precipitation and stream discharge determined from medium- and coarse-grained sediment in saline lakes
R.Y. Anderson 73
Fine-grained submarine fans as possible recorders of long- and short-term climatic changes
A.H. Bouma 85
Physical climate signatures in shallow- and deep-water deltas
G. Postma 93
The link between abrupt climate change and basin stratigraphy: a numerical approach
M.D. Morehead, J.P. Syvitski and E.W.H. Hutton 107
Registration of abrupt climate changes within fluvial systems: insights from numerical modelling experiments
A. Veldkamp and L.A. Tebbens 129
Morphology of subglacial conduit deposits: control by bedrock topography, discharge flow variation, or both? A cautionary case study: Axelsberg, Nynäshamn, south central Sweden
A.M. Fard 145
Glacier surging as a control on the development of proglacial, fluvial landforms and deposits, Skeiðarársandur, Iceland
A.J. Russell, P.G. Knight and T.A.G.P. Van Dijk 163
Thermokarst sediments and sedimentary structures, Tuktoyaktuk Coastlands, western Arctic Canada
J.B. Murton 175

Morphology and sedimentology of a giant supraglacial, ice-walled, jökulhlaup channel, Skeiðarárjökull, Iceland: implications for esker genesis
A.J. Russell, Ó. Knudsen, H. Fay, P.M. Marren, J. Heinz and J. Tronicke 193
Continental response to Heinrich events and Bond cycles in sedimentary record of Lake Baikal, Siberia
A.A. Prokopenko, D.F. Williams, E.B. Karabanov and G.K. Khursevich 217
A 340,000 year record of ice rafting, palaeoclimatic fluctuations, and shelf-crossing glacial advances in the southwestern Labrador Sea
R.N. Hiscott, A.E. Aksu, P.J. Mudie and D.F. Parsons 227
Sedimentary records of paleoenvironmental changes during the last deglaciation in the Ulleung Interplain Gap, East Sea (Sea of Japan)
J.J. Bahk, S.K. Chough, K.S. Jeong and S.J. Han 241
Sedimentological evidence of a meandering Younger Dryas subglacial conduit: Horn, SE central Sweden
A. Mokhtari Fard and B. Ringberg 255
Stratigraphic signatures of climatic change during the Holocene evolution of the Tigris–Euphrates delta, lower Mesopotamia
A.A.M. Aqrawi 267
Plant remains, alluvial chronology, and cave speleothem isotopes indicate abrupt Holocene climatic change at 6 ka in midwestern USA
R.G. Baker, E.A. Bettis III, R.F. Denniston and L.A. Gonzalez 285
Climatic response of Quaternary alluvial deposits in the upper Kali Gandaki valley (West Nepal)
K. Monecke, J. Winsemann and J. Hanisch 293
Fluvial response to the Late Valdai/Holocene environmental change on the East European Plain
A. Sidorchuk, O. Borisova and A. Panin 303
Detection of rapid climate change in Last Glacial fluvial successions in The Netherlands
J. van Huissteden and C. Kasse 319
The fluvial system response to abrupt climate change during the last cold stage: the Upper Pleistocene River Thames fluvial succession at Ashton Keynes, UK
S.G. Lewis, D. Maddy and R.G. Scaife 341